CHAPTER-2

Research Methodology
To fulfill the motive of writing this research work and the methods used in the study, their description are given in this chapter:

**Meaning of Research Methodology**

Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. In it, we study the various steps that are generally adopted by a researcher in studying his/her research problem along with the logic behind them. It is necessary for the researcher to know not only the research methods/techniques but also the methodology. Researcher not only needs to know how to develop certain indices or tests, how to calculate the mean, the mode, the median, how to apply particular research techniques, etc. but they also need to know which of these methods or techniques, are relevant and which are not and what would they mean and indicate and why? Researchers also need to understand the assumptions underlying various techniques and they need to know the criteria by which they can decide the certain techniques and procedure will be applicable to certain problems and others will not. This means that it is necessary for the researcher to design his methodology for his problem as the same, may differ from problem to problem. For example, an architect, who designs a building, has to consciously evaluate the basis of this decision i.e. he has to evaluate why and on what basis he selects particular size, number and location of doors, windows and ventilators, uses particular materials and the like.¹

Research is an attempt to know new things, facts, information etc. in a scientific manner. Its main purpose is to diffuse knowledge and establish theories on the basis of the believable facts. Infact, research is an art of scientific investigation. The Advanced Learner's Dictionary of Current English lays down the meaning of research as "a careful investigation or inquiry specially through search for new facts in any branch of knowledge".² Redman and Mory define research as a "systematized effort to gain new knowledge".³ D. Slesinger and M. Stephenson in the Encyclopedia of Social Sciences defined research as "the manipulation of things, concepts or symbols for the purpose of generalizing to extend, correct or verify knowledge, whether that knowledge aids in construction of theory or in the practice of an art".⁴
Research is, thus, an original contribution to the existing stock of knowledge making for its advancement. It is the pursuit of truth with the help of study, observation, comparison and experiment. In short, the search for knowledge through objective and systematic method of finding solution to a problem is research. The systematic approach concerning, generalization and the formulation of a theory is also a research. As such the term research refers to the systematic method consisting of enunciating the problems, formulating a hypothesis, collecting the facts or data, analyzing the facts and reaching certain conclusions either in the form of solutions towards the concerned problems or in certain generalization for some theoretical formulation.

**Importance of Research:**

Research is carried on in the social field not just with academic interests. It has both academic and non-academic purposes and importance. Importance of research can be briefly stated here.

(i) Research is essential to diffuse knowledge and to expand its horizon.

(ii) Research helps us to verify or disprove confirm or reject, modify and re-assert the existing theories and to establish new ones.

(iii) Research provides practical clues, to undertake measures that leads to social improvement, social change or social progress.

(iv) Research provides new insight regarding their nature. Research helps us to know the nature and magnitude of the problems.

(v) Researches have commercial importance also. Industries, business firms and commercial establishments can get lot of information and clues about their endeavours in society.

(vi) Research can provides all the required data and facts to the administrators to adopt and undertake appropriate policies, plans and programmes.

(vii) Research has educational importance. It is mainly an intellectual activity. Information obtained through research may have their educational importance.

(viii) Research has practical implication for formal and informal types of leadership, patterns of influence and reform in different spheres of society.
Objects of Social Research:

Various objects of social research may be classified into two parts: academic and utilitarian.

1. **Academic:**

   The academic purpose of social research is the acquisition of knowledge. The thirst of knowledge has been responsible for vast variety of research work even when no material incentives were present. Thus, the primary objectives of social research is to get true and intimate knowledge of human society and its functioning, to know and understand the laws that are operating behind various social activities of man.

2. **Utilitarian:**

   The other purpose of social research is utilitarian in nature. According to P.V. Young, "the primary goal of research immediate or distant to understand social life and thereby gain a greater measure to control over social behaviour". Human society suffers from a number of social evils which conclusively prove that all these evils or at least most of them have their roots in the organization of human society and its working. If these evils are destroyed from the roots, the society will be free from evils and everlasting human happiness might be secured.

   Thus, social research tries to explore these fundamental trails of human nature so that an attempt may be made to destroy these evils roots from the society.

**Essential Qualities of a Social Research:**

Besides the qualities essential for every scientist, a social researcher needs a number of social qualities. These qualities can be classified in the following manner:

1. **Personal Qualities:** A social researcher has to meet people from various walks of life and has to discuss a variety of topics. He must be a good conversationalist, possess ready with and ability to get across his ideas to others. He must possess the ability to progressively refine his data and techniques. He must know his subject thoroughly, and be able to take quick decisions.

2. **Social Qualities:** The skill to deal effectively with others requires social qualities like pleasant manners, good humouredness, ability to establish rapport with others etc. A social researcher must be alert and able to vary his techniques, he must be scrupulously honest and have the intellectual integrity. A research worker must be
tactful and resourceful enough to make improvisations, he must not do so at the expense of his basic conditions. He must have the quality of patience.

3. Mastery of Subject: Before investigating any social phenomenon a social worker has to master all the present and past facts about it. Only if he has familiarized himself about each and every aspect of the problem, can he hope to face his problem, confidently and maturely. Before interviewing his subject he must acquaint himself about their social background.

4. Time and Place Considerations: Before approaching his subjects, a social scientist must ensure that the time and place of interview is both proper and mutually suitable.

5. Other considerations: Social research employs many tools, like questionnaire, schedule and interview. The social worker must be fully acquainted about the nature, the purpose and the limitation of these tools. He should also avoid all types of biases and preoccupations must be motivated by an urge to gain scientific knowledge and make discoveries. His efforts must not be swayed by personal conditions of pleasure or pain. He must not get personally involved with the person he interviews. He must be sufficiently trained to resist temptations and seductions which may present themselves in his work. For this practical experience and emotional maturity is needed.

Statistical Research:

It is profitable to make a definite plan before doing investigation, which brings more clarity in study. Research methods can be constructed on the basis of investigating problems or hypothesis. Due to this, researcher gets definite direction and also gets help in his/her research.

Meaning of Statistical Investigation:

Generally investigation means search of knowledge by using rules of statistics on the basis of numerical data which is called "Statistical investigation". Those problems which can be represented in a numerical form, can be its subject matter of statistical investigation for e.g. population, unemployment, problem of price increase etc.
Statistical investigation is a long process. It has to pass from different stages that is from the beginning to the end while making a report.

Main stages of statistical investigation are in the following ways:

(i) Preparation of Investigation: In the beginning, we should remember motives of our investigation, its nature, area/scope etc to make a broad and clear picture of a plan for investigation.

(ii) Collection of data: It includes the collection of data according to the motive of a investigation.

(iii) Editing of collected data: Sometimes we make mistakes in collecting data or forget to include some important information during collection of data. But with the help of editing we can solve these mistakes and include the important data at the end to receive the correct conclusion.

(iv) Representation of data: After the editing of data we have to make these data attractive and easy to understand by using any suitable methods, for this we can take the help of classification, tabulation, graphs, pie chart etc.

(v) Analysis of Data: This is one of the important part of the statistical investigation, which includes analysis of data by different statistical method. Analysis represent the base of work selection.

(vi) Selection of work: After the analysis of data, there is a selection of work through which we can get important and suitable conclusion. It is a technical in nature, thus it is necessary to take caution to avoid any mistake/error. If there is any mistake/error all the efforts of our work will become useless.

(vii) Report Writing: This is the last stage of investigation. In this we have to make a report on the basis of conclusion drawn.

Before starting the investigation it is necessary to keep some points in our mind which are as follows:

(i) Selection of Problem: There is one of the biggest problem that researcher faces while selecting the problems of subject in any field. While selecting the subject, researchers have to keep some facts in his/her mind. Firstly, problems should be according to his/her interest, so that researcher can work with his/her full efforts and with hard working, try to reach deeply in his/her subject. Selection of the problem
should be in such a way that it can easily be measured and evaluated. More over important conclusions can be drawn and besides this it should be useful in both sides i.e. theoretical and habitual, through which any class of a society can get profit out of it. Subject of research should also be selected on the basis of resources available. Thus, research problem which is selected by a researcher should depend upon his/her eligibility. After selecting his/her research problem, researcher can easily reach to his/her targeted aim. 

The topic of my research work which is selected by me entitled "Planning for Rural Employment : A Case Study of Sagar District". In Sagar district the following two major schemes: (i) Swarnjayanti Gram Swarozgar Yojana, which is launched on April 1, 1999 and (ii) Mahatma Gandhi National Rural Employment Guarantee Act which is running since 2007 onwards and both the schemes are run by the Government. Sagar district has been chosen for the study and research work because Sagar district is a backward district of Bundelkhand region. In a district where agriculture is mostly depend upon rains and there is lack of industrialization, due to this there is vast unemployment in rural areas of the district. Moreover researcher belongs to Sagar district and got this opportunity to see the situation of unemployment very closely. Due to the above causes researcher was encouraged to do research on this topic. The main motives of research work is to do micro study of two major schemes i.e., SGSY and MNREGA, which are running by the Government to remove unemployment and to provide employment and self employment in the rural areas. Through these two schemes, main objective of the present study is to find out how successful the government programme is in removing unemployment in the rural areas? What changes have been made in economic condition of the people and to know whether all the economic spectrum of the society have been included in these two schemes or not? To get these motives the beneficiaries/labourers who are benefited by these two schemes i.e. in SGSY since last 6 years (2003-04 to 2008-09) and in MNREGA since last 4 years (2007-08 to 2010-11) in the study region is the finding of the research.

2. **Objectives of Research Work**:

Following are the main objectives of research work:

I. The main objectives of Swarnjayanti Gram Swarozgar Yojana for my survey are as follows:

(a) To find out whether this scheme provides self employment among individuals and Self Help Groups (SHGs).
(b) To find out whether this scheme has helped in generating self employment to individuals and SHGs in Sagar district.

c) To find out how many individuals got self employment in Sagar district from year 2003-04 to 2008-09 under this scheme.

(d) To access the real situation of beneficiaries under this yojana.

e) To find out the role of financial institution in this scheme.

(f) To find out the problems faced by beneficiaries in this yojana.

(g) Whether the loans given to beneficiaries under this scheme is sufficient in generating self employment or not in Sagar district.

(h) To know what extent this scheme is successful in Sagar district.

II) The main objectives of MNREGA for the present study are as follows:

(a) To find out how many individuals were employed in Sagar district from year 2007-08 to 2010-11.

(b) To find out the major works carried out under this scheme in Sagar district.

c) To know how many works were allotted to different blocks of Sagar district.

(d) To find out how many works have been completed during the period, block wise under this scheme in Sagar district.

(e) To find out how many works are still in progress, block wise under this scheme in Sagar district.

(f) To find out how much expenditure was done on various works in this scheme during the period i.e., from year 2007-08 to 2010-11.

(g) To find out the role of financial institution in this scheme.

(h) To access the real situation of labourers, who are job card holders in this scheme.

(i) To find out the problems faced by labourers in this scheme.

(j) Finally, to know what extent this scheme is successful in Sagar district.
In this way, the main motive of the study is to collect information of these two schemes i.e., SGSY and MNREGA which are run by the government to remove rural unemployment from the Sagar district and give suggestion to the Madhya Pradesh Government regarding these two yojanas.

The objective of this investigation should be clear. After clearance of objectives it becomes very easy in collection of data and analysing of data. If the objectives are not clear then researcher may miss his/her path and will collect unimportant data.

3. **Area of investigation:**

Before starting the investigation it is necessary to choose the area so there would be no wastage of time, wealth and power and researcher don't get the wrong result. Area should be according to our motive. It is rightly said regarding the size of the area that the area should not be so small from where sufficient material can not be collected and as a result we can't get the right conclusion. For the specific study we have to choose specific type of area like from the administrative view point area should be a region or district, from economic view point the area should be agriculture or industrial and from the nature's view point the area should be plain, forest or mountainous etc.¹¹

The area of investigation is the rural areas of Sagar district and studied Sagar district block wise. In this district these are eleven blocks: Banda, Bina, Deori, Jaisinagar, Kesli, Khurai, Malthone, Rahatgarh, Rehli, Sagar and Shahgarh, the whole survey is done block wise for both the schemes.

4. **Types of Investigation:**

Before starting the investigation, which method should be used in investigation has been finalised. For different investigation different type of methods has been used. Same type of investigation is not eligible in every place. During study the motives, area, resource and purity has been considered at the time of choosing methods for investigation.

Following are the different types of investigations:

i. **Direct or Indirect Survey** - In direct surveys quantitative description is possible and whereas quantitative description is not possible in indirect survey. For instance, the demographic surveys are direct, but on the other hand the survey of
health condition and level of nutrition are indirect. Both types of social surveys have their own place in social study.

ii. **Census Survey or Sample Survey** - In the census all units are counted separately and then the sum of all units are computed. On the other hand, in sample survey, only some representative units are studied. Compared to total or census survey the representative surveys take less time and less energy consuming, but they are valid only if the sample selected is really representative and the entire field is harmonious. If the units are heterogeneous, sample survey is not possible.

iii. **Primary or Secondary Survey** - In Primary Survey, the actual information which are received by the researcher for social study form the actual field of research. These data are obtained by means of questionnaires and schedules. On the other hand in secondary survey, the information is attained indirectly. Such data are attained generally from published and unpublished materials, and there is no need to examine them afresh by a new survey. Thus primary survey is for more reliable than the secondary survey.

iv. **Initial or Repetitive Survey** - If in any area the survey is being made for the first time it is called Initial Survey but if it is being made second or third time it is called Repetitive survey.

V. **Official, Semi Official or Private Survey** - Official surveys are conducted by the Government, and the surveys conducted by quasi-government institutions like university, corporations, boards etc. are semi-official. If the survey is conducted by some non-government persons or agency it is called private survey.

vi. **Widespread or Limit Survey** - The widespread survey takes very large area or multiple aspect for survey purposes, while a limited survey is confined to a small area and usually deals with some specific questions. Obviously, limited survey has greater reliability than the widespread survey.

vii. **Public or Confidential Survey** - Some surveys are of general type and their data is not of highly personal nature. Accordingly, no secrecy is maintained in collection of data or publication of results. These surveys are, therefore, known as public survey. On other hand, if the nature of the survey is such that information collected is not to be revealed to public, the survey is confidential.
viii. **Postal or Personal Survey** - If the means of collecting data are dispatch of questionnaires and schedules by post, it is called postal survey, but if the information is collected by means of direct interview of respondents it is called personal survey.

ix. **Regular or Ad-hoc Survey** - Regular surveys are made periodically without fail. For example the State Bank of India makes such survey, while ad-hoc surveys are conducted for specific purposes and are not periodically revised.¹²

Sampling method used for the intensive study. Under SGSY, sample of 10% i.e., 158 individuals out of 1584 individuals and 72 self help groups out of 720 SHGs has been taken. Under MNREGA out of 3,67,152 job card holders 550 labourers are randomly surveyed in the sample survey because it is not possible for an individual researcher to survey more than 550 individuals under this scheme. In this survey, to collect data related to the problems of beneficiaries/ labourers, who are benefitted by these two schemes in Sagar district, direct personal investigation or direct interview method has been used. This is one of the best methods to collect primary data. Under this method research scholar take data from the direct contact with the respondent. By this methods researcher's behaviour, skillness and courage are checked. The data which collected by this method are more reliable. This method is very useful in those places where the researcher can observe the activities of the beneficiaries/labourers directly in the field. Thus, this method is useful to get more purity and to keep data in secret.

**Sampling:**

The U.S. Bureau of the census used it first in 1940. Prior to that recorded instances are relatively few in number. After 1920 sampling began to develop systematically and much of the growth was in agricultural field rather than in social research. In recent years, sampling has become an essential part of research procedure and every researcher required to be familiar with its logic and some of its important techniques.¹³

Sampling is not typical of science only. In a way, we also practice crude versions of sampling in our day to day lines. The house wives, for example, press a few cobs of boiled rice to be able to declare that it is ready to be served. Understandably, it is not feasible to examine each and every grain in the cooking pot,
thus, instead of studying each and every unit, in sampling method, a small portion is selected which represents the whole population.\textsuperscript{14}

According to P.V. Young, "A statistical sample is a miniature picture or cross section of the entire group or aggregate from which the sample is taken. The entire group from which a sample is chosen is known as the 'population'; 'Universe' or 'Supply'.\textsuperscript{15}

According to Goode and Hatt, "A sample as the name implies, is a smaller representation of a larger whole."\textsuperscript{16}

The idea of sampling is quite old, though the theory of sampling has developed in recent years. Very often a handful of grains of boiling rice is examined to ascertain whether it is cooked or not, and a doctor examines a few drops of blood to ascertain the blood type. Likewise this technique is employed in many other fields. The main object of sampling technique is to draw conclusions about the whole by examining only a part of it.

**Essential of sampling:**

The choice of a sample as representatives of the whole group is based upon following assumptions:

1) **Underlying homogeneity amidst complexity:** Although things, specially phenomena, appear to be very complex in nature, so that no two things appear alike, a keener study has disclosed that beneath this apparent diversity there is underlying fundamental unity. Apparently every student may appear to be different. There are differences of health, body, habits, personality etc. But fundamentally they are similar in many respects, so that a study of some of them will throw significant light upon the whole group. It is the possibility of such ideal types in the whole population that makes sampling possible. If no two students were alike in any respect the sampling would have been impossible.

2) **Possibility of Representative Election:** The second assumption is that it is possible to draw a representative sample. It has been proved that if a certain number of units are selected from a mass on purely random basis, every unit will have a chance of being included and the sample so selected will contain all types of units, so that it may be representative of the whole group. This principle is popularly known as the law of statistical regularity and is the very basis of all sampling enquiries.
3) **Absolute Accuracy not Essential:** The third basic factor is the fact that absolute accuracy is not essential in case of mass study. In large scale studies we have to depend upon averages which are considered fairly significant in any type of enquiry, the result of sampling studies although not hundred percent accurate are nevertheless sufficiently accurate to permit valid generalizations:

4) **Independent:** All units of a sample must be independent of each other. In other words inclusion of one item in the sample should not be dependent upon the inclusion of another items of the universe.

5) **Adequacy:** The number of items in the sample should be fairly adequate so that some reliable conclusion can be drawn.\textsuperscript{17}

**Importance of sampling in Social Research:**

Sampling studies are becoming more and more popular in all types of mass studies, but they are specially important in case of social surveys. The vastness of the population, the difficulties of contacting people, high refusal rate, difficulties of ascertaining the universe make sampling the best alternative in case of social studies. Recent developments in sampling techniques have made this method more reliable and valid. The result of sampling have attained a sufficiently high standard of accuracy. In social research a close study of the people has to be made generally taking a sufficiently long period in studying each unit. Under such circumstances sampling is most suitable to be resorted to.\textsuperscript{18}

**Methods of Sampling:**

The main methods of selecting a sample are the following:

1. **Deliberate sampling or purposive sampling:** In this method the investigator choose certain items from the whole data and studies them only. To choose or leave an item for the purpose of study depends entirely upon the wishes of an investigator and he will choose item or units, in his judgment are representative of the whole data.

   This is a very simple technique of choosing the samples and is useful in cases where the whole data is homogeneous and the investigator has full knowledge of the various aspects of the problem. Though deliberate of purpose, this method does not imply arbitrary choice. In fact, it means that only those units which represent the whole will be selected.
2. Random sampling: Of all the methods of selecting the samples, Random sampling is made maximum use of and it is considered the best method of sampling selection. In this technique every item or unit of the domain has an equal opportunity for selection and this selection is in no way influenced by personal bias and prediction of the investigator. No item is selected on account of likes or dislikes of the investigator and the selection is left entirely to chance. This provides every item fair and equal chance for selection; so it is not investigator's whim but nature which determines the selection.

Random sampling is made in the following ways:

a. Lottery method
b. By rotating the Drum.
c. Selecting from sequential list
d. Tippet's Numbers

3. Stratified Sampling: This method of selecting samples is a mixture of the Deliberate and Random Sampling techniques. In this first of all the data in a domain is split into various classes on the basis of their characteristics and immediately thereafter certain items are selected from these classes by the random sampling technique. That is why this is known as mixed technique of sampling. This technique is suitable in those cases in which the data has sub data having special characteristics. The stratification is made on the basis of the special attributes and from these strata item are selected at random.

4. Quota Sampling: In this the entire data is split up into as many blocks as there are investigators and each investigator is asked to select certain items from his block study. The success for this method depends upon the integrity and professional competence of investigators.

5. Multi Stage Sampling: In this, items are selected in different stages at random.

6. Convenience Sampling: In this investigator selects certain items from the domain as per his convenience. No planned effort is made to collect information. This is a method by which a tourist studies generally the country of his visit. He comes across certain people and things has transaction with them, and then tries to generalize about
the entire population in his travelogue. This is essentially unscientific procedure and has no value as a research technique.\textsuperscript{19}

\textbf{Size of Sample:}

This refers to the number of items to be selected from the universe to constitute a sample. This is the major problem before a researcher. The size of sample should neither be excessively large, nor too small, it should be optimum. An optimum sample is one which fulfills the requirements of efficiency, representativeness, reliability and flexibility. While deciding the size of sample, researcher must determine the desired precision as also an acceptable confidence level for estimate. The size of population variance needs to be considered as in case of larger variance usually a bigger sample is needed. The size of population must be kept in view for this also limits the sample size. The parameters of interest in a research study must be kept in view, while deciding the size of the sample. Costs too dictate the size of sample that we draw. As such, budgetary constraint must invariably be taken into consideration when we decide the sample size.\textsuperscript{20}

\textbf{Sample Design:}

For collecting the primary statistics of the beneficiaries/labourers from the two major schemes i.e., Swarnjayanti Gram Swarozgar Yojana and Mahatma Gandhi National Rural Employment Guarantee Act, in order to conduct a sample survey to access their real situation of the beneficiaries/labourers.

In Swarnjayanti Gram Swarozgar Yojana there are 1584 individuals and 720 Self Help Groups are benefitted from year 2003-04 to 2008-09 in Sagar district, for the survey researcher have taken sample of 10% of the individuals and Self Help Groups. To carryout the survey 158 individuals and 72 Self Help Groups selected as sample from the eleven blocks of Sagar district. These individuals and Self Help Groups are distributed according to the population size of the block.

For Self Help Groups, 14 to 10 SHGs are selected from those blocks having more than 2,50,000 population. Further, 9 to 7 Self Help Groups are selected from those blocks, having the population between 2,50,000 to 1,50,000 and 6 to 1 Self Help Groups are selected from those blocks having the population less than 1,50,000 for the survey according to 2001 Census.
For individuals, 40 to 20 individuals are selected from those blocks having the population more than 2,50,000. The blocks having population between 2,50,000-1,50,000 from there 19 to 10 individuals have been selected and blocks having less than 1,50,000 population from there 9 to 2 individuals have been selected for the survey according to 2001 census.

Further to make the study more comprehensive, beneficiaries of this yojana from following categories have been selected:

1. General
2. Scheduled Caste
3. Scheduled Tribe
4. Other Backward Caste
5. Minorities
6. Women, and
7. Disabled persons

In Mahatma Gandhi National Rural Employment Guarantee Act, there are 3,67,152 job card holders (labourers) in Sagar district from the year 2007-08 to 2010-11. Out of these job cards holders 550 labourers are surveyed randomly from the eleven blocks of the Sagar district because it is not possible for an individual researcher to survey more than 550 labourers. Here, 59 to 47 labourers are selected randomly from each block of Sagar district. This selection is also based on my own convenience of transport. Sagar city is not well connected within itself. Some blocks like Jaisinagar, Malthone, Rehli, Shahgarh etc are not well connected and are about 50 to 60 kms from Sagar city. Most of the surveys done with own conveyance of the researcher but at the time of visiting remote villages for survey her father accompanied her to those places. As selection of labourers is based on random sampling, the number of labourers are randomly selected from the eleven blocks of Sagar district.

Further these 550 labourers are distributed randomly in the following manners: in Banda block 50, Bina block 51, Deori block 50, Jaisinagar block 47, Kesli block 48, Khurai block 51, Malthone block 48, Rahatgarh block 48, Rehli block 48, Sagar
block 59 and in Shahgarh block 50 labourers have been surveyed from the different gram panchayats of the block.

For getting more clear picture of this scheme in Sagar district, further these labourers have been selected from the following categories:

(i) General
(ii) Scheduled Caste
(iii) Scheduled Tribe
(iv) Other Backward Caste
(v) Minorities and
(vi) Women

Thus, these categorisation in both the scheme are done to know whether all the economic spectrum of the rural area have been included in these two schemes or not.

**Schedule:**

Schedule is one of the tools which students generally come across while conducting the social research. This technique is popularly used with profitable results. Although schedules and questionnaires sound a similar type of methodological instrument yet for a social scientist both carry specific meaning. Generally a questionnaire is mailed to the respondents while schedule is the form containing some questions or blanks tables which is always taken by the investigator and filled in by himself after getting information from the informants.

Goode and Hatt define the schedule and write: "Schedule is the name applied to a set of questions which are asked and filled in by an interviewer in a face to face situation with a person or group of persons."

In this way a schedule is the patterned set of questions which is structured, meaning thereby that the investigator is not free to make any change in the order of questions. The questions in a schedule are logically related to a central problem. Generally structured questions are asked in a schedule although open-ended questions are also included at time.

Bogardus consider a schedule as the method of collecting objective data and writes: "The schedule represents a formal method of securing facts that are in
objective form and easily discernible ..... the schedule is filled out by the investigator himself."²²

Mc Cornic has considered a schedule as a mechanism to test a hypothesis. He says that the "Schedule is nothing more than a list of questions which are answered in order to test the hypothesis."²³

C.A. Moser, writes; "Since it is handled by interviewers, it can be a fairly formal document in which efficiency of filed handling rather than attractiveness is the operative consideration in design." Since the investigator remains face to face with the respondents, he has sufficient scope to explain the motive of the research and at the same time to deal with the vagueness occurring on account of the expression and the content of the questions."²⁴

Thus, schedule is more advantageous in a universe which contains illiterate mass. Illiterate persons have many problems relating to understanding of the questions and the significance of the problem under study. As such, these problems can be coped with by the researcher himself and the motive of the research can be properly achieved. In a country like our schedule can serve as a useful technique for collecting data.

Kinds of Schedules:

The schedules used in the social research may be classified into following four groups according to the use to which they are put:

1. Observation Schedule: These schedules are used for observation purposes. They contain specific topics upon which the observer has to concentrate and the nature of information that he has to record. Such schedules make the observation more pointed and accurate by pointing clearly what is to be observed, how is it to be observed and how is it to be recorded.

2. Rating Schedules: They are used in those cases where the attitude or opinion is to be measured. Different ranks or scales are constructed for this purpose.

3. Document Schedules: These schedules are used for recording data from written documents like autobiography, case history, diary or official records maintained by the government. Such schedules are used for preparing the source list or collecting preliminary information about the universe.
4. **Interview Schedules:** These schedules are used for interview purpose. They contain standard questions that the interviewer has to ask and blank tables that he has to fill up after getting information from the respondents.

5. **Institutional survey forms or evaluational schedules:** The use of these schedules as is evident from the name, is made to gather data about specialized institutions or agencies. The form and the size of evolutoinal schedules is determined by the nature and the complexity of the problems of an institution; more complex the problem bigger the size of the schedule.

**Aims of Schedule**

Mrs. P.V. Young has laid emphasis on the following aims of the schedule. According to her, a researcher "makes the schedule guide, a means of delimiting the sense of his enquiry, a memory tickler a recording device." These are discussed below:

1. Delimitation of the topic: A schedule is always about a definite item of inquiry; its subject is a single and isolated subject item rather than the subject in general. The interviewer presents questions about one item and notes down answer about it. Therefore, schedule delimits and specifies the subject of inquiry.

2. Aids memory: In an interview the choice of question is left entirely to the interviewer; there is always a chance of some important points being left. Therefore, in the schedule the list of questions is preplanned and noted down formally. The interviewer is always armed with the formal document detailing the questions.

3. Aid to classification and analysis: When the interviewer obtains replies to the questions given in the schedules, these replies are classified and analysed. Therefore, all varieties of replies are shifted and classified under various heads.

**The qualities of a Good Schedules:**

According to P.V. Young, there are two qualities of a good schedules: a) Accurate communication, and b) Accurate response.

1) Accurate communication: Accurate communication is achieved when respondents understand the questions in the same sense which they are expected to convey. Thus, the basis of accurate communication is proper wording of questions. The questions
should be so worded that they may clearly carry the desired sense without any ambiguity.

2) Accurate Response: Accurate response is said to have been achieved when replies contain the information sought for. This information should be unbiased and true. The respondents may also co-operate in filling the schedule, by giving out correct information.26

Following steps are generally taken to achieve the above two objectives:

(i) The size and physical structure of the schedule should be attractive.

(ii) The questions should be clearly worded, easy to follow without any ambiguity or doubt.

(iii) Right type of questions should be asked.

(iv) Questions asked or information sought should be adequate and relevant to the enquiry, so that final generalization may be based upon it.

(v) The information sought should not only be valid, it should also be capable of being tabulated and if possible being subjected to statistical analysis.

**Case Study Method:**

In the field of social research we use not only the statistical and quantitative techniques but also the use of qualitative techniques is made. Under certain circumstances and particular cases where the emphasis of our study is on the depth, understanding of problem and the need for generalization is not great the use of qualitative methods is indicated. In other words, if we wish to study a particular case intensively, we must use the qualitative methods because the qualitative techniques touch only those aspects of a case which are common with others and therefore, generalizable.

According to P.V. Young, "Case study is a method of exploring and analyzing the life of a social unit, be that a person, a family institution, culture, group or even entire community."27
According to Goode and Hatt, "A way of organising social data so as to present the unitary character of the social subject being studied. Expressed some what differently, it is an approach which views a social unit as a whole."

According to Hsin Pao Yang, "Case study method may be defined as a small inclusive and intensive study of an individual in which the investigator brings to bear all his skills and methods, or as a systematic gathering of enough information about a person to permit one to understand how he or she functions as a unit of society."

**Characteristics of Case Study Method:**

1. **Study of a Unit:** The case study method studies a subject matter which forms a cohesive whole and may be treated as a unit. It can be an institution or a group or even a community provided these are cohesive and homogenous and may be studies as integral wholes.

2. **Intensive and Depth Study:** In this, it deals with every aspect of the subject and studies it both intensively and extensively. That is, each element is studied deeply and no element is left untouched.

3. **Knowledge of Behaviour Pattern:** It deals with both what and why of the subject, i.e., it tries to describe the complex behavioral pattern of a unit and, tries to discover the factors which will rationally account for them. It also explains the place and role of a unit in its surrounding social miller.

4. **The study of the whole unit:** It tries to perceive the unitary forces of the subject matter and organise it into an integral whole. In other words, it is a view point which sees the social phenomenon as an integral unit having unifying bond of thread binding all of its diverse elements. Accordingly, this method treats man, family, institution or a group as a whole.

**Utility of case study Method:**

1. Formulation of valid Hypothesis: It is a fundamental assumption of the case study method that human nature is uniform, many valid hypothesis can be constructed on its basis.

2. Aid of Sampling: The case studies help in classifying the unit in a much better and efficient manner. A case study helps to fix definitely the character of a particular unit, and this, in turn, helps to classify it and similar units under a well determined head.
3. Aid to forming questionnaire and schedules: The greatest obstacle in the way of forming a useful and efficient questionnaire is the selection of queries which will yield the desired response. The case studies are of immense value in this regard.

4. Study of process: A stabilized material can be studied by a technique; but the effective study of dynamic and mobile material requires intensive and genetic approach possible only in the study method.

5. Gain in Experience: In the case study a researcher undertakes an intensive and extensive study of definite unit for a long period, he gain many new insights into human behaviour and become emotionally mature.

6. Appreciation of quantitative analysis in actual situations: The researchers who do not come in contact with the actual situations and individuals would not quite appreciate the various static. A researcher doing actual case work can appreciate these for better.

**Method of Survey:**

For survey, direct interview method is used, in the method research scholar herself under contact with the respondents for investigation and went to their houses, field, sights where the works are going on, to collect information and to fill the schedule/ questionnaire and take notes of the surroundings in order to collect data about the problems which beneficiaries/labourers are facing by these two schemes.

1. **Quantity of Purity:** Before starting the investigation it is necessary to define the quantity of purity. Purity should be sufficient through which can reliable on data. Purity of quantity depends upon its nature and motive of investigation. For example, in the measurement of Gold, quantity of purity is necessary but in case of coal, measure of quantity of purity is not so important.

Research Scholar has made the base of quantity of purity for her research study.

2. **Determination of Statistical Unit:** There is a important place of statistical unit in statistical investigation. Statistical unit is a measurable resources on the basis of which data are collected, represent the data and disintegration of data. Normally, any unit may have different meaning. For example, to know the wages it is necessary to know what wages here mean. That means wages may be on daily labours, weekly or
monthly labours. It may be cash form or actual wages. In present investigation researcher should keep in her mind simplicity, clarity, definitely, stability and comparability before the time she decided the statistical unit.

3. Collection of data: According to collections, there are two types of data, which are as follows :

i) Primary data : Primary data are the actual information which are received by the researcher for social study from the actual field of research. These data are obtained by means of questionnaire/ schedules or through direct interview or observation method. Such data are known as primary because they are attained by the researcher from the field of research directly and for the first time.

Primary data is gathered through the following ways:

Direct observation:

The chief primary source of information concerning social phenomena is direct observation. This method requires that the social researcher should personally and directly observe the conditions and incidents of this field of study. Direct observation has been classified into participant observation and non-participant observation. In participant observation the observer lives in the groups of community as a member of it and participates in their life. And in non-participant observation, the researcher does not participate in the group life but only observe as an external spectator.

Questionnaire:

Questionnaire includes questions concerning different aspects of the subject of study. It is used where the subject of study is very wide and direct observation is not possible. It is also used about such things which can not be known through direct observation such as the ideas, intentions and motives of the persons concerned. Sometimes the questionnaire are delivered by hand and at other times they are delivered through post, only when the informers are well educated and prepared to co-operate with the research worker.

Schedule:

Schedules are a particular type of questionnaire. The main distinction between questionnaires and schedules is that in the former, the informer themselves reply to
the question, in schedules this is done by the researcher himself. He questions the informers and records, the replies in the proper places specified in the schedules. The main advantage of a schedule is that it may be used even in the case of uneducated informer. However, it can be used only in a limited field, as compared to the questionnaire methods.

**Interview:** In an interview, the researcher meets people and discusses their social problems with them, during this discussion, he gathers facts. In interview no such definite form or order of questions are there like questionnaire or schedule have. In interview, researcher may ask and question on the basis of his insight into the problem.

**Secondary Data:**

Secondary data are the information which are attained indirectly. The secondary source of information includes all types of published and unpublished, public or private documents and other such types of information.

According to Lundberg, "The information achieved from inscriptions, on stones and objects of excavations may also be included in secondary data."

Secondary data is gathered through the following ways: Published and unpublished documents:

1. **Published:** Some public documents are published in the general interest of the public. Such documents may be prepared by government or non-government departments. Some important published sources are:

   - **Records:** Records occupy the most important place among public document. Most of the governmental and non-governmental departments preserve so many types of records consisting of important information. All these records are important sources of information for social research.

   - **Published Data:** Data published by government and non-government institutions from time to time. Such institutions conduct rate of employment, poverty, rate of mortality, foreign trade etc.

   - **Journals and Magazines:** Journals and magazines are important documents including a wide variety of information which can be usefully utilised by social research and these information are very much reliable.
• **Newspapers:** Newspapers publish news, discussions on contemporary issues, reports of meeting, conferences, etc. All this is an important sources of information for different binds of social research.

• **Other Documents:** Besides the above documents films, television, radio and public speeches etc are other important sources of information. The investigator should be capable of sorting out the reliable material and distinguishing it from the unreliable material advanced by these sources.

• **University Institutes:** Today in India almost every big university has established some centers or institutes for collecting and preserving various types data published from time to time.

• **Trade Chambers:** Different trades have their independent chambers which collect data concerning their particular trade, All India Chamber of Commerce and Industry also collects and publishes various types of data.

• **Transport Department:** Transport department collects data on All India Level and publishes them in Traffic Survey.

2. **Unpublished Sources:** There are some documents which generally remain unpublished such as reports of big companies, confidential records of government departments and non government institutions, these are generally unpublished.

   There are many materials which were collected by government institutes or talented and experienced personalities but they are still remains unpublished. If those materials are available, then we can also use them in our data collection.\(^{31}\)

   Collection of data is one of the important activity of statically investigation, thus huge building of investigation is standing on the base of these data. Thus, there is needed to take precaution in this work. Those precaution, plan and solution which is used in collecting data for research study, their brief explanation are given below:

   i) After making the contact with respondent, firstly researcher has to give introduction of herself/himself, introduce his/her motives of contact, survey and utility to respondent with good behaviour so he/she can trust/ believe on research, so that respondent won't hesitate or take objection of the question which are asking from the schedule.
ii) For the purpose to make the permanent record of collected data and for the editing, classification as well as for analysing in the mark of our motive of survey, use the schedule which already made before.

iii) Literate respondent filled the given schedule and in the reference if respondent is unable to understand any columns or question then researcher will explain the meaning of that columns or question in order to avoid error.

iv) Illiterate respondent is unable to fill their schedule, in that case researcher fills their form while taking interview according to the questions which is given in the schedule.

v) While asking the question from the respondent to fill the schedule it is duty of the researcher not to hurt their self respect and desires of the respondent; so that there respondent won't bring excitement, objection or doubt in their mind. To take respondent in trust in the unknown place during our survey we should take the help to CEO Janpad, Sarpanch, Secretary etc of that area.

vi) When researcher feel that the information which is collected from the respondent are not so reliable due to the lack power of remembering. In such cases a researcher can go through the filled questionnaire/schedule and pre-checked the method to get actual and proved data. With the help of filled questions and check method, we can make our survey without error.

Research scholar feels that if the collected data are reliable, he/she get more scientific and useful conclusion. With this motive of research, research scholars collect both the types of data i.e., primary data and secondary data. Primary data are more reliable, pure an actual, therefore researcher tried to collect the data from the different places of Sagar district. Researcher personally feels that those data which collected through primary data are more reliable, thus it is an actual important activity of research. Researcher collects important information from the beneficiaries/labourers through direct interview in the rural area of Sagar district for her survey. Researcher promises those respondents who gave important information that their name and their information will kept in secret. Further researcher will check the purity, actuality, reality of the collected data to avoid error and find out correct conclusion.

To complete our survey secondary data also play an important role. In survey, researcher use both published and unpublished data. Firstly, researcher will use those
data which is published by government for example different documents, magazines, reports of committee official records, etc. for deep study and through this deep study, we make up coming strategy of present research management by these study materials. Researcher tried herself best to collect data and information from the Sagar district for examples various information and data are collected from District Statistical Office, Irrigation Office, Zila Panchayat, Employment Office, District Rural Development Agency, Village Panchayat, C.E.O. Janpad Office etc.

**Organisation of Data:**

Generally, data which are collected through primary and secondary methods find many mistakes and irregularity in these data. It is necessary to check these mistakes before analysis of data, to obtain correct conclusion. Thus checking and correcting mistakes and fault in the collection of statistical material according to rule, that activity is called organization of data.\(^{32}\)

Thus, after the collection of data researcher organised important data in a serial and remove the mistakes through the deep study and tried to complete these incomplete data and information.

**Analysis of Data :**

The data, after collection, has to be processed and analysed in accordance with the outline laid down for the purpose at the time of developing the research plan. This is essential for a scientific study and for ensuring that we have all relevant data for making contemplated comparisons and analysis.\(^{33}\) Following are the methods which used in analysis of collected data.

(i) **Classification :** Researcher studies result in a large volume of raw data which must be reduced into homogeneous groups if we are to get meaningful relationships. This fact necessitates classification of data which happens to be the process of arranging data in groups or classes on the basis of common characteristics. Data having a common characteristics are placed in one class and in this way the entire data get divided into a number of groups or classes.

(ii) **Tabulation :** When a mass of data has been assembled, it becomes necessary for the researcher to arrange the same in some kind of concise and logical order. This procedure is referred to as tabulation. Thus, tabulation is the process of summarizing raw data and displaying the same in compact form (i.e. in the form of statistical
Tabulation is essential because of the following reasons:

(i) It conserves space and reduces explanatory and descriptive statement to a minimum.

(ii) It facilitates the process of comparison.

(iii) It facilitates the summation of items and the detection of errors and omissions.

(iv) It provides a basis for various statistical computations.

**ii) Diagramatic Presentation:** Researcher use diagramatic representation for data and information which collected during survey in order to make more interesting and to understand in first view. We use line diagram, Bar graphs, pie charts, maps etc.

Researcher selected the data with precaution and unbiased feeling. After the selection of classification and tabulation of data, researcher use different mathematical analysing methods like average ratio, mean, percentage etc. and also graphical presentation through which conclusion can be drawn and easily understandable. Researcher make data useful by closest and accessory methods so that clear and easy conclusion can be obtain. Information which available to researcher is also very useful in getting correct conclusions.

**Limitation of Researcher:**

There is a limitation in Research. Present research also has her own limits and the biggest limit for the researcher is time and resources. Researcher completed the present research with in a time period for the Ph.D. (degree) and researcher has completed by her own resources.

Although research scholar has collected all the data with full efforts, seriousness and rectitude, but than there are some peoples who became speed breaker/barriers in my research way peoples like government officers and their clerks, people who are unhelpful in nature, laziness of workers, disputes between sarpanch and secretary in the village etc., some people shows disinterest and not willing to gave me information which I really needed for my survey because of the fear that information will be leaked. Than also research scholar any how collected all the information/data and tried to complete present research work.
It is natural that due to the incorporative of some people, thus present research work may not be upto the mark, in that case request for forgiveness.

References:

5. Trivedi, R.N. and Shukla, D.P., Research Methodology, College Book Depot, Jaipur, 1989, p.34.
22. Emory, S. Bogardus, Introduction to Social Research, p.45.
28. Goode and Hatt, Methods of Social Research, p.204.